

Amendment to the Claims

Claims 1 – 13 (Cancelled).

14. (Currently amended) A method of measuring a blood flow rate ~~introducing an indicator through a catheter~~, the method comprising:

(a) passing a guide wire through an indicator lumen in an elongate catheter body to pass a portion of the guide wire through a terminal port of the indicator lumen;

(b) passing the indicator through the indicator lumen to pass from the elongate catheter body through the terminal port and an injection port intermediate the terminal port and a proximal end of the catheter body; and

(c) measuring the blood flow rate based on the ~~compensating for~~ passage of the indicator through the terminal port.

Claim 15 (Cancelled).

16. (Previously presented) The method of Claim 14, further comprising passing the guide wire through a reduced cross sectional area of the indicator lumen.

17. (Previously presented) The method of Claim 14, further comprising passing the indicator through the indicator lumen to contact a portion of the guide wire.

18. (Previously presented) The method of Claim 14, further comprising passing the guide wire through a reduced cross sectional area of the indicator lumen to increase a flow of the indicator through the injection port.

19. (Previously presented) The method of Claim 14, wherein compensating for passage of the indicator through terminal port includes compensating for a volume of the indicator passing through the terminal port.

20. (Currently amended) The method of Claim 14, wherein measuring the blood flow rate ~~compensating for passage of the indicator through terminal port includes compensating for a volume of the indicator passing through the terminal port corresponding~~ corresponds to ~~[[the]]~~ a relationship

$$Q = \frac{k(T_b - T_i) \cdot V(1 - a)}{S}, \text{ where } Q \text{ is a blood flow rate, } k \text{ is a coefficient related to}$$

thermal capacity of a measured flow and the indicator, T_b is ~~[[the]]~~ a temperature of ~~[[the]]~~ a measured flow prior to injection of the indicator, T_i is ~~[[the]]~~ a temperature of the indicator prior to entering the measured flow, V is ~~[[the]]~~ a volume of the indicator, S is ~~[[the]]~~ an area under ~~[[the]]~~ a temperature versus time curve resulting from ~~[[the]]~~ a mixing of the indicator and a is ~~[[the]]~~ a portion of the indicator passing through the terminal port.

21. (Withdrawn) The method of Claim 14, wherein compensating for passage of the indicator through terminal port includes compensating for a thermal effect of the indicator passing through the terminal port.

22. (Withdrawn) The method of Claim 14, wherein compensating for passage of the indicator through terminal port includes compensating for a thermal effect of the indicator passing through the terminal port corresponding to the relationship $Q = \frac{k(T_b - T_i) \cdot V(1 - a)}{(S_m - S_{in})}$, where Q is a blood flow rate, k is a coefficient related to thermal capacity of a measured flow and the indicator, T_b is the temperature of the measured flow prior to injection, T_i is the temperature of the indicator prior to entering the measured flow, V is the volume of the indicator, S_m is the total area under the temperature versus time curve resulting from the mixing of the indicator, S_{in} is the part of the area under the dilution curve related to a cooling thermal change of a sensor inside the catheter body and a is the portion of the indicator passing through the terminal port.

Claims 23 – 27 (Cancelled).